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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,718	07/06/2004	Nils Bottke	53209	7194

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EXAMINER
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KEYS, ROSALYND ANN

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,718

Applicant(s)

BOTTKE ET AL.

Examiner

Rosalynd Keys

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-12 and 14 is/are rejected.
- 7) ☒ Claim(s) 3, 4 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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**DETAILED ACTION**

***Status of Claims***

1. Claims 1-14 are pending.

Claims 1, 2, 5-12 and 14 are rejected.

Claims 3, 4 and 13 are objected.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 2, 5-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wender et al. (US 2,682,562).

Wender et al. teach reduction of aromatic aldehydes and aromatic alcohols by reaction with hydrogen in the presence of a carbonyl of cobalt or a cobalt salt such as cobalt acetate tetrahydrate as catalyst at elevated temperature and pressure (see entire disclosure, in particular column 1, line 6 to column 4, line 64, example 7 and example 11). The reaction temperature may vary between 70° and 250°C (see column 4, lines 27-39). The pressure is at least 40 atm (see column 4, lines

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40-52). The reaction can take place with or without a solvent (see column 4, lines 56-64). The use of supports is well known and the claimed catalyst supports are well known. Thus, there selection would have been obvious to one having ordinary skill in the art. One having ordinary skill in the art at the time the invention was made would be motivated to utilize a catalyst support if one desires to increase the surface area of the catalyst.

The instant method differs from the method of Wender et al. only in that the instant starting compound and final product contain additional hydroxyl or methoxy groups. However, the starting compounds are analogous in that they each either a benzaldehyde or a benzyl alcohol, thereby producing the corresponding toluene derivative.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ the process of Wender et al. with the expectation of obtaining the desired product because he would have expected the analogous starting materials to react similarly. Further, once the general reaction has been shown to be old, the burden is on the applicant to present reason or authority for believing that a group on the starting compound would take part in or affect the basic reaction and thus alter the nature of the product or the operability of the process. See *In re Neunebauer et al.* (CCPA 1964) 330 F2d 353, 141 USPQ 205 and *In re Boe et al.* (CCPA 1974) 505 F2d 1297, 184 USPQ 38.

***Response to Amendment***

5. The rejection of claims 1, 2, 5, 6, 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Nightingale et al. (J. Organic Chemistry, Vol. 14, 1949, pp. 1089-1093) is withdrawn due to the amendment filed August 2, 2006, which limits the catalyst to one consisting essentially of components a, b and c.

***Allowable Subject Matter***

6. Claims 3, 4 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments filed August 2, 2006 have been fully considered but they are not persuasive. The Applicants arguments with respect to the catalyst being a cobalt carbonyl and the need to have carbon monoxide present in the reaction mixture of Wender et al. have been considered but they are not persuasive. The Examiner agrees that Wender et al. teach that the catalyst is cobalt carbonyl, but Wender et al. also teach that the catalyst can also be a cobalt salt such as cobalt acetate tetrahydrate. This teaching meets the claimed limitation. The presence of carbon monoxide or the insitu generation of a cobalt carbonyl in the reaction of Wender et al. is not excluded by the claim limitation consisting essentially of because the presence

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of carbon monoxide and the insitu generation of cobalt carbonyl do not materially effect the basic and novel characteristics of the claimed invention, i.e., the ability to prepare a toluene derivative without the need for expensive noble metal catalysts and the avoidance of side reactions and the use of corrosive solvents.

For the above reasons the Examiner believes the instant claims are unpatentable over Wender et al.

### **Conclusion**

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M-W & F 5:30-8:30 am & 1-5 pm;Th 5:30 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Rosalynd Keys  
Primary Examiner  
Art Unit 1621

October 15, 2006